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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,272	08/21/2003	Alan P. Carpenter JR.	PH-7108 (BMS-2301)	7239

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EXAMINER
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JONES, DAMERON

ART UNIT	PAPER NUMBER
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1618

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/645,272

Applicant(s)

CARPENTER ET AL.

Examiner

D. L. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-103 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-103 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

RD

## RESTRICTION INTO GROUPS

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the first agent of claim 35*, classified in class 424, subclass 9.4.
  - II. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the second agent of claim 35*, classified in class 424, subclass 9.4.
  - III. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the third agent of claim 35*, classified in class 424, subclass 9.4.
  - IV. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the fourth agent of claim 35*, classified in class 424, subclass 9.4.
  - V. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor

targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the fifth agent of claim 35*, classified in class 424, subclass 9.4.

- VI. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the sixth agent of claim 35*, classified in class 424, subclass 9.4.
- VII. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the seventh agent of claim 35*, classified in class 424, subclass 9.4.
- VIII. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the eighth agent of claim 35*, classified in class 424, subclass 9.4.
- IX. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the ninth agent of claim 35*, classified in class 424, subclass 9.4.
- X. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor

targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the tenth agent of claim 35*, classified in class 424, subclass 9.4.

- XI. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the eleventh agent of claim 35*, classified in class 424, subclass 9.4.
- XII. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the twelfth agent of claim 35*, classified in class 424, subclass 9.4.
- XIII. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the thirteenth agent of claim 35*, classified in class 424, subclass 9.4.
- XIV. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the fourteenth agent of claim 35*, classified in class 424, subclass 9.4.

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- XV. Claims 1-47, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the fifteenth agent of claim 35*, classified in class 424, subclass 9.4.
- XVI. Claims 1-34, 36-47, 85, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the first agent of claim 85*, classified in class 424, subclass 9.4.
- XVII. Claims 1-34, 36-47, 85, 91, 93, 95, and 103, drawn to a diagnostic agent and use thereof comprising a metal, 1-10 matrix metalloproteinase inhibitor targeting moieties, a chelator, and optionally, a linking group wherein the *agent is the second agent of claim 85*, classified in class 424, subclass 9.4.
- XVIII. Claims 1-34, 36-47, 91, 93, 95, and 103, drawn to diagnostic agents not encompassed in Groups I-XVII above, classified in class 424, subclass 9.4.
- XIX. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group,

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wherein the *targeting moiety (Q)* has formula (1) on page 87, classified in class 424, subclass 9.5.

XX. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (2) on page 87, classified in class 424, subclass 9.5.

XXI. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (3) on page 87, classified in class 424, subclass 9.5.

XXII. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (4) on page 87, classified in class 424, subclass 9.5.

XXIII. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (5) on page 87, classified in class 424, subclass 9.5.

- XXIV. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (6) on page 88, classified in class 424, subclass 9.5.
- XXV. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (7) on page 88, classified in class 424, subclass 9.5.
- XXVI. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (8) on page 89, classified in class 424, subclass 9.5.
- XXVII. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (9) on page 89, classified in class 424, subclass 9.5.
- XXVIII. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix



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metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (10) on page 89, classified in class 424, subclass 9.5.

XXIX. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (11) on page 90, classified in class 424, subclass 9.5.

XXX. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (12) on page 91, classified in class 424, subclass 9.5.

XXXI. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (13) on page 91, classified in class 424, subclass 9.5.

XXXII. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally,

a linking group, wherein the *targeting moiety (Q)* has formula (14) on page 91, classified in class 424, subclass 9.5.

XXXIII. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agent and use thereof comprising an echogenic gas, 1-10 matrix metalloproteinase inhibitor targeting moieties, a surfactant, and optionally, a linking group, wherein the *targeting moiety (Q)* has formula (15) on page 91, classified in class 424, subclass 9.5.

XXXIV. Claims 48-84, 86-90, 92, 94, and 96-102, drawn to a diagnostic agents and uses thereof not encompassed in Groups XIX-XXXIII above, classified in class 424, subclass 9.5.

**Note:** Claims appearing in more than one group will be examined only to the extent that they read on the elected group.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I-XXXIV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the claims are drawn to numerous patentably distinct groups that have no common core, are distinct inventions, and a search of one group of agents would neither anticipate nor render obvious agents of a different group. Furthermore, while the classifications for some of the groups overlap, each group represents a patentably

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distinct product with distinct physical and functional characteristics. Also, the searching for more than one product would be burdensome because each group requires a separate 'structure and word search' of the various databases.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. Due to the complexity of the restriction requirement, a telephone call was not made to request an oral election to the above restriction requirement.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143).

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. L. Jones whose telephone number is (571) 272-0617.

The examiner can normally be reached on Mon.-Fri., 6:45 a.m. - 3:15 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
D. L. Jones  
Primary Examiner  
Art Unit 1616

April 14, 2005